		_ 			I		-	Sheet 1 of 12
FORM P	TO - 1	449			ATTY DOCKET N	NO.: AS	SC-023DV	C2
SUPPLE	MENT	AL INFORMA	TION		APPLICANTS:	Fit	zgerald	
DISCLO	SURE	STA KEPMENT	€ \		SERIAL NO.:	10	/022,689	
	. (DEC 0 2 200	<u>ತ</u> ್ತ		FILING DATE:	De	cember 17	, 2001
	1		<i>5</i>		GROUP:	28	13	
		TATE TRADE	II C	DATEN	DOCUMENTS		••	
EXAM.	1	DOCUMENT	DATE	NAME	DOCUMENTS	CLASS	CUID	EII DIC DATE IS
INIT.	, 	NUMBER	DATE	NAME		CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
XIL	Al	4,010,045	03/01/1977	Ruehrwein	1			
XIL	A2	4,710,788	12/01/1987	Dambkes o	et al.			
X	A3	4,987,462	01/22/1991	Kim et al.				-
RU	A4	4,990,979	02/05/1991	Otto		 		
XW	A5	5,013,681	05/07/1991	Godbey et	al.		i i	-1
XU,	A6	5,155,571	10/13/1992	Wang et al	l.	1	- :	13
XW	A7	5,166,084	11/24/1992	Pfiester			7	CHMOLOG OEC -
AU	A8	5,202,284	04/01/1993	Kamins et	al.	 		MOTOR SEC
XVI	A9	5,207,864	05/04/1993	Bhat et al.			 	
VII	A10	5,208,182	05/04/1993	Narayan e	t al.	(9 2063 CENTER
ZVI	AII	5,212,110	05/18/1993	Pfiester et	al.			, ~
8/1	A12	5,221,413	06/22/1993	Brasen et a	al.	 	1	2.80
1211	A13	5,241,197	08/31/1993	Murakami	et al.		1	===
6011	A14	5,285,086	02/08/1994	Fitzgerald	, Jr.			
2/11	A15	5,291,439	03/01/1994	Kauffman	n, et al.	 		
200	A16	5,310,451	05/10/1994	Tejwani et	al.			
MAN	A17	5,316,958	05/31/1994	Meyerson		†	 	
VII.	A18	5,346,848	09/13/1994	Grupen-St	nemansky et al.		-	
A	A19	5,374,564	12/20/1994	Bruel			-	
SAL	A20	5,413,679	05/09/1995	Godbey		1		
AL	A21	5,426,069	06/20/1995	Selvakum	ar et al.			
SIL	A22	5,426,316	06/20/1995	Mohamma	nd			
MI	A23	5,461,243	10/24/1995	Ek et al.			 	
M	A24	5,461,250	10/24/1995	Burghartz	et al.			
XXII	A25	5,462,883	10/31/1995	Dennard e	t al.	 	-	
All	A26	5,476,813	12/19/1995	Naruse	· · · · · · · · · · · · · · · · · · ·			
W.	A27	5,479,033	12/26/1995	Baca et al.		1	-	<u> </u>
	A28	5,484,664	01/16/1996	Kitahara e	t al.	1	<u> </u>	
1	A29	5,523,243	06/04/1996	Mohamma	ad		T	
1 the	A30	5,523,592	06/04/1996	Nakagawa		-	-	

ORM PTO - 1	449			ATTY DOCKET N	10.: AS	SC-023DV	C2
UPPLEMENT	AL INFORMA	TION		APPLICANTS:	Fit	zgerald	
VISCEOSURE	State February			SERIAL NO.:	10	/022,689	
	DEC O 2 2003	710E		FILING DATE:	De	cember 17	7, 200 [
\3	k d			GROUP:	28	13	
	TRADENAN	/ II S	PATENT	r documents		·	
XAM.	DOCUMENT	DATE	NAME	DOCUMENTS	CLASS	SUB	FILING DATE IF
NIT.	NUMBER	DATE	NAME		CLASS	CLASS	APPROPRIATE
A31	5,536,361	07/16/1996	Kondo et a	ıl.			
A32	5,540,785	07/30/1996	Dennard e	t al.			
A33	5,596,527	01/12/1997	Tomioka,	et al.	_		
A34	5,617,351	04/01/1997	Bertin, et a	ıl.			i
A35	5,683,934	11/04/1997	Candelaria	l			유
A36	5,698,869	12/16/1997	Yoshimi e	t al.		:	2
A37	5,728,623	03/17/1998	Mori				0000 OHC
A38	5,739,567	04/14/1998	Wong				9
A39	5,759,898	06/02/1998	Ek et al.				1 3 E
A40	5,777,347	07/07/1998	Bartelink		<u> </u>	į.	□ □ □ □
A41	5,786,612	07/28/1998	Otani et al	· · · · · · · · · · · · · · · · · · ·			2800
A42	5,786,614	07/28/1998	Chuang, e	t al.	 	ξh.	
A43	5,792,679	08/11/1998	Nakato		 	 	
A 144	5,808,344	09/15/1998	Ismail et a	1	1===		ļ
A45	5,847,419	12/08/1998	Imai et al.		+	 	
A46	5,877,070	03/02/1999	Goesele et	al.		1	
A47	5,906,708	05/25/1999	Robinson	et al.		+	
A48	5,912,479	06/15/1999	Mori et al		!	 	
X (A49	5,943,560	08/24/1999	Chang et		 		
ASO ASO	5,963,817	10/05/1999	Chu et al.				
WI ASI	5,966,622	10/12/1999	Levine et		1	 	
A52	5,998,807	12/07/1999	Lustig et a		-		
OJO A53	6,013,134	01/11/2000	Chu et al.		 	 	
X A54	6,033,974	03/07/2000	Henley et				
ASS ASS	6,033,995	03/07/2000	Muller		-		-
A A56	6,058,044	05/02/2000	Sugiura e	t al.	-	 	
A57	6,074,919	06/13/2000	Gardner e		$\mid \leq$	+	
A58	6,096,590	08/01/2000	Chan et a		 	 	
A A59	6,103,559	08/15/2000	Gardner e		1	 	
A60	6,111,267	08/29/2000	Fischer et		+		
*****	1,,,,,,,,,,		1		<u> </u>		

ATTY DOCKET NO.: ASC-023DVC2

	SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT			APPLICANTS:	Fit	zgerald				
DISCLO	SURE	21 STANDALFINE	C _e		SERIAL NO.:	10	/022,689			
	1	NET. 0 2 2000	ان الله الله الله الله الله الله الله ال		FILING DATE:	De	cember 1	7, 2001		
	1	ULU	OFFICE		GROUP:	28	13			
·		TRADEN	II S	DATENI	r DOCUMENTS				-	┨
EXAM.	1	DOCUMENT	DATE DATE	NAME	DOCUMENTS	CLASS	SUB	EU DICE		┨
INIT.		NUMBER		NAME		CLASS	CLASS	FILING D		l
Ale	A61	6,117,750	09/12/2000	Bensahel e	et al.	1				1
10	A62	6,130,453	10/10/2000	Mei, et al.	· · · · · · · · · · · · · · · · · · ·				<u> </u>	1
Dle	A63	6,133,799	10/17/2000	Favors, Jr.	, et al.	-				1
Ple	A64	6,140,687	10/31/2000	Shimomur	a et al.	 				1
Du	A65	6,143,636	11/07/2000	Forbes, et	al.	-				1
Du	A66	6,153,495	11/28/2000	Kub et al.	 			1 - 5	020 · 030	1
1/2/h	A67	6,154,475	11/28/2000	Soref et a	l.				를	12
Xte	A68	6,160,303	12/12/2000	Fattaruso		1			5 17	15
Xle	A69	6,162,688	12/19/2000	Gardner et	al.					01110
2000	A70	6,184,111	02/06/2001	Henley et	al.				2003	ן נ
De	A71	6,191,007	02/20/2001	Matsui et a	al.			1	2 ~	1 '
Ku	A72	6,191,432	02/20/2001	Sugiyama	et al.				2800	1
Ple	A73	6,194,722	02/27/2001	Fiorini et a	al.		1	12.	<u></u>	1
de	A74	6,204,529	03/20/2001	Lung, et a	l.		 			1
Ale.	A75	6,207,977	03/01/2001	Augusto						1
Re	A76	6,210,988	04/03/2001	Howe et a	l.	<u> </u>				1
Xle	A77	6,218,677	04/17/2001	Broekaert				-		1
De	A78	6,232,138	05/15/2001	Fitzgerald	et al.			-		1
RD	A79	6,235,567	05/22/2001	Huang						1
Du	A80	6,242,324	06/05/2001	Kub et al.						1
V91	A81	6,249,022	06/19/2001	Lin, et al.						1
De	A82	6,251,755	06/26/2001	Furukawa	et al.					
All	A83	6,261,929	07/01/2001	Gehrke et	al.		 	1		1
1/12	A84	6,266,278	07/24/2001	Harari, et	ai.	 				1
X	A85	6,271,551	08/07/2001	Schmitz et	t al.					1
	A86	6,271,726	08/07/2001	Fransis et	al.					†
Alle	A87	6,313,016	11/06/2001	Kibbel et	al.			T		1
XX	A88	6,316,301	11/13/2001	Kant		1	 			1
Vall	A89	6,323,108	11/27/2001	Kub et al.		1	+	 		1
De	A90	6,329,063	12/11/2001	Lo et al.			<u> </u>			1
EXAMI	VED	house	e Soli	7.5	DATE CONSID		81.0	04		า์

FORM PTO - 1449

FORM PTO - 1449

ATTY DOCKET NO.:

ASC-023DVC2

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

APPLICANTS:

Fitzgerald

SERIAL NO.:

10/022,689

FILING DATE:

December 17, 2001

GROUP:

2813

TIC	PATENT	DOCID	MENTE
U.S.	PAIENI	DUCU	VIENTS

EXAM.		DOCCALBAN	DATE	NAME	CLASS	SUB	FILING DATE IF
INIT.		NUMBER				CLASS	APPROPRIATE
XX	A91	6,335,546	01/01/2002	Tsuda et al.	****		07/30/1999
De	A92	6,339,232	01/15/2002	Takagi			09/20/1999
XX	A93	6,368,733	04/09/2002	Nishinaga			08/05/1999
Re	A94	6,372,356	04/16/2002	Thornton et al.			04/028/2000
de	A95	6,399,970	06/04/2002	Kubo et al.			09/16/1997
De	A96	6,407,406	06/18/2002	Tezuka			06/29/1999
Xee	A97	6,425,951	07/30/2002	Chu et al.			08/06/1999
Die	A98	6,429,061	08/06/2002	Rim			07/26/2000
sele	A99	6,420,937	07/16/2002	Akatsuka et al.			06/14/2001
All	A100	6,521,041	02/18/2003	Wu et al.			04/09/1999
See	A101	6,555,839	04/29/2003	Fitzgerald			05/16/2001
NI	A102	6,583,015	06/24/2003	Fitzgerald et al.			08/06/2001
De	A103	6,521,041	02/18/2003	Wu et al.			04/09/1999
Du	A104	2001/0003364	06/14/2001	Sugawara et al.			12/08/2000
SUL	A105	2002/0043660	04/18/2002	Yamazaki et al.			06/25/2001
Me	A106	6,593,191	07/15/2003	Fitzgerald			05/16/2001
1 Se	A107	6,573,126	06/03/2003	Cheng et al.			08/10/2001
Se	A108	2002/0096717	07/25/2002	Chu et al.			01/25/2001
Sh	A109	2002/0100942	08/01/2001	Fitzgerald et al.			06/19/2001
Son	A110	2002/0123167	09/05/2002	Fitzgerald			07/16/2001
Du	Alli	2002/0123183	09/05/2002	Fitzgerald			07/16/2001
1 les	A112	2002/0123197	09/05/2002	Fitzgerald et al.]		06/19/2001
Ru	A113	2002/0125471	09/12/2002	Fitzgerald et al.			12/04/2001
R	A114	2002/0125497	09/12/2002	Fitzgerald			07/16/2001
86	A115	6,603,156	08/05/2003	Rim			03/31/2001
De	A116	2003/0003679	01/02/2003	Doyle et al.			06/29/2001

EXAMINER Laces Selects

DATE CONSIDERED 8/4/64

FORM PTO - 1449

ATTY DOCKET NO.:

ASC-023DVC2

SUPPLEMENTAL INFORMATION

DISCLOSURE STATEMENT

APPLICANTS:

Fitzgerald

SERIAL NO.:

10/022,689

FILING DATE:

December 17, 2001

GROUP:

2813

		AT & TR	FORE	IGN PATE	NT DOC	UMENT	S		
EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
XII	ВΙ	41 01 167	07/23/1992	DE				NO	NO
Ru	B2	0 587 520	03/16/1994	EP				NO	YES
Ne	B3	0 683 522	11/22/1995	EP	e.			NO	YES
XIL	B4	0 828 296	03/11/1998	EP				NO	YES
Du	B5	0 829 908	03/18/1998	EP				NO	YES
AL	B6	0 838 858	04/29/1998	EP				NO	NO
XU	В7	1 020 900	07/19/2000	EP				NO	YES
ADO	B8	1 174 928	01/23/2002	EP				NO	YES
XII.	В9	2 342 777	04/19/2000	GB	<u> </u>		1	YES	YES
De	ВІО	10-270685	10/09/1998	JP				NO	YES
She	ВП	11-233744	08/27/1999	JP			1	NO	NO
Du	B12	2000-021783	08/31/2000	JP	<u> </u>	 	1	NO	YES
KU	B13	2000-031491	01/28/2000	JP		<u> </u>		NO	ИО
Kli	BI4	2001-319935	11/16/2001	JP				NO	YES
De	B15	2002-076334	03/15/2002	JР			<u> </u>	NO	YES
D	B16	2002-164520	06/07/2002	JP				NO	YES
Di	B17	2002-289533	10/04/2002	JР				NO	YES
Ale	B18	4-307974	10/30/1992	JР				NO	NO
de	B19	5-166724	07/02/1993	JP	1		<u> </u>	NO	Abstract On
Ale	B20	6-177046	06/24/1994	JP	_			NO	Abstract On
Ali	B21	7-106446	04/21/1995	JР				NO	NO
M.	B22	7-240372	09/12/1995	JР	1	1		NO	Abstract On
RD	B23	00/48239	08/17/2000	wo	(1		NO	YES
San	B24	00/54338	09/14/2000	wo				NO	YES

EXAMINER Masses School

DATE CONSIDERED

14/04

FORM 1	FORM PTO - 1449					DOCKET N	O.: AS	C-023DVC2	
		TAL INFORM			APPLICANTS: Fitzgerald				
DISCLO	SURE	STATEMENT	C		SERIAI	_ NO.:	10/0	022,689	
	OIPE VOTOS					DATE:	Dec	ember 17, 200)1
DEC 0 2 MM SS					GROUI) :	281	3	
	1	FIRM A TRAD	FORE	IGN PATE	ENT DO	CUMEN	ΓS		
EXAM.		DOCUMENT	DATE	COUNTRY	CLAS	S SUB	FILING	ABSTRACT	ENGLISH
INIT.		NUMBER		CODE		CLASS	DATE	ONLY	LANG (Y/N)
XIO	B25	01/022482	03/29/2001	wo				NO	YES
De	B26	01/54202	07/26/2001	wo				NO	YES
Ne	B27	01/93338	12/06/2001	wo				NO	YES
Me	B28	01/99169	12/27/2001	wo	-			NO	YES
Ale	B29	02/071488	09/12/2002	wo				NO	YES
Rle	B30	02/071491	09/12/2002	WO				NO	YES
210	B31	02/071495	09/12/2002	wo				NO	YES
Ph	B32	02/082514	10/17/2002	WO				NO	YES
De	B33	02/13262	02/14/2002	wo	1			NO	YES
Lee	B34	02/15244	02/21/2002	WO				NO	YES
Ne	B35	02/27783	04/04/2002	wo	7-			NO	YES
He	B36	02/47168	06/13/2002	wo	-			NO	YES
W.	B37	98/59365	12/30/1998	wo				NO	YES
AD	B38	99/53539	10/21/1999	wo				NO	YES
120	B39	6-252046	11/19/1992	JР				NO	YES

TECHNOLOGY CENTER 2800

EXAMINER have Se

DATE CONSIDERED

FORM	PTO -	- 1449	ATTY DOCKET NO.:	ASC-023DVC2				
		ITAL INFORMATION	APPLICANTS:	Fitzgerald				
DISCLO	SURI	E STATEMENT	SERIAL NO.:	10/022,689				
		DEC 0 2 2003 &	FILING DATE:	December 17, 2001				
		DEL ST	GROUP:	2813				
	EXAM. OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)							
EXAM. INIT.	отн	ER DOCUMENTS: (Including Author, Tit	le, Date, Relevant Pages, Pla	ce of Publication)				
pale	Cl	Armstrong et al., "Design of Si/SiGe Het Transistors," IEDM Technical Digest (19						
All	C2	Armstrong, "Technology for SiGe Hetero Massachusetts Institute of Technology, I		evices", PhD Thesis,				
Rle	C3	Augusto et al., "Proposal for a New Process Flow for the Fabrication of Silicon-based Complementary MOD-MOSFETs without ion Implantation," Thin Solid Films, vol. 294, no. 1-2, pp. 254-258 (February 15, 1997).						
Ale	C4	Barradas et al., "RBS analysis of MBE-grown SiGe/(001) Si heterostructures with thin, high Ge content SiGe channels for HMOS transistors," Modern Physics Letters B (2001) (abstract).						
De	C5	Borenstein et al., "A New Ultra-Hard Etch-Stop Layer for High Precision Micromachining," Proceedings of the 1999 12th IEEE International Conference on Micro Electro Mechanical Systems (MEMs) (January 17-21, 1999) pp. 205-210.						
fle	C6	Bouillon et al., "Search for the optimal channel architecture for 0.18/0.12 µm bulk CMOS Experimental study," IEEE, (1996) pp. 21.2.1-21.2.4.						
Al	C7	Bruel et al., "®SMART CUT: A Promis International SOI Conference (October I		hnology," Proceedings 1995 IEEE				
She	C8	Bruel, "Silicon on Insulator Material Tec pp. 1201-1202.	chnology," Electronic Lette	ers, Vol. 13, No. 14 (July 6, 1995)				
De	C9	Bufler et al., "Hole transport in strained Physics, Vol. 84, No. 10 (November 15,		ey substrates," Journal of Applied				
Alle	C10	Burghartz et al., "Microwave Inductors a Technology", IEEE Transactions on Mic 1996, pp. 100-104.						
See	CII	Canaperi et al., "Preparation of a relaxed semiconductor devices with strained epit USA (2002) (abstract).						
De	C12	Carlin et al., "High Efficiency GaAs-on- IEEE (2000) pp. 1006-1011	Si Solar Cells with High V	oc Using Graded GeSi Buffers,"				
De	C13	Chang et al., "Selective Etching of SiGe No. 1 (January 1991) pp. 202-204.	/Si Heterostructures," Journ	nal of the Electrochemical Society,				
XII	C14	Cheng et al., "Electron Mobility Enhancement in Strained-Si n-MOSFETs Fabricated on SiGe-on-Insulator (SGOI) Substrates," IEEE Electron Device Letters, Vol. 22, No. 7 (July 2001) pp. 321-323.						
XI	C15 Cheng et al., "Relaxed Silicon-Germanium on Insulator Substrate by Layer Transfer," Journal of Electronic Materials, Vol. 30, No. 12 (2001) pp. L37-L39.							

EXAMINER LOQUE Sele DATÉ CONSIDERED 8/4/04

10-	1449	ATTY DOCKET NO.:	ASC-023DVC2					
		APPLICANTS:	Fitzgerald					
SUKI	STATION OF STATE OF S	SERIAL NO.:	10/022,689					
	0 2 7 7003 24	FILING DATE:	December 17, 2001					
GROUP: 2813								
TA TRADE THER ART, JOURNAL ARTICLES, ETC.								
отн	ER DOCUMENTS: (Including Author, Tit	le, Date, Relevant Pages, Pla	ce of Publication)					
C16								
C17								
C18			Ge on Si(100)," Physical Review					
CI9	Feijoo et al., "Epitaxial Si-Ge Etch Stop Layers with Ethylene Diamine Pyrocatechol for Bonded and Etchback Silicon-on-Insulator," Journal of Electronic Materials, Vol. 23, No. 6 (June 1994) pp. 493-496.							
C20	Fischetti et al., "Band structure, deformation potentials, and carrier mobility in strained Si, Ge, and SiGe alloys," J. Appl. Phys., Vol. 80, No. 4 (August 15, 1996) pp. 2234-2252.							
C21	Fischetti, "Long-range Coulomb interactions in small Si devices. Part II. Effective electronmobility in thin-oxide structures," Journal of Applied Physics, Vol. 89, No. 2 (January 15, 2001) pp. 1232-1250.							
C22	Fitzgerald et al., "Dislocation dynamics in relaxed graded composition semiconductors," Materials Science and Engineering B67, (1999) pp. 53-61.							
C23								
C24								
C25			presence of germane," Applied					
C26	Gray and Meyer, "Analysis and Design of 605-632.	of Analog Integrated Circui	ts", John Wiley & Sons, 1984, pp.					
C27	technique and growth atmosphere," App 2531-2533.	lied Physics Letters, Vol. 6	3, No. 18 (November 1, 1993) pp.					
C28	Hackbarth et al., "Alternatives to thick N 369, No. 1-2 (July 2000) pp. 148-151.	1BE-grown relaxed SiGe b	uffers," Thin Solid Films, Vol.					
C29			ructure field-effect transistors,"					
C30	Herzog et al., "SiGe-based FETs: buffer pp. 36-41.	r issues and device results,"	Thin Solid Films, Vol. 380 (2000)					
C31	Höck et al., "Carrier mobilities in modulation doped Sil-xGex heterostructures with respect to FET applications," Thin Solid Films, Vol. 336 (1998) pp. 141-144.							
	C16 C17 C18 C19 C20 C21 C22 C23 C24 C25 C26 C27 C28 C29 C30	C16 Cullis et al, "Growth ripples upon straine interactions," Journal of Vacuum Science 1924-1931. C17 Currie et al., "Carrier mobilities and proc virtual substrates," J. Vac. Sci. Technol. C18 Eaglesham et al., "Dislocation-Free Strar Letters, Vol. 64, No. 16 (April 16, 1990) C19 Feijoo et al., "Epitaxial Si-Ge Etch Stop Etchback Silicon-on-Insulator," Journal of 496. C20 Fischetti et al., "Band structure, deformat SiGe alloys," J. Appl. Phys., Vol. 80, No. C21 Fischetti, "Long-range Coulomb interactithin-oxide structures," Journal of Applied Science and Engineering B67, (1999) pp. C23 Fitzgerald et al., "Dislocation dynamics in Science and Engineering B67, (1999) pp. C24 Fitzgerald et al., "Relaxed GexSi1-x strudimensional electron gases in Si," AT&T Vacuum Society, pp. 1807-1819 C24 Fitzgerald et al., "Totally Relaxed GexSi on Si Substrates," Applied Physics Letter Physics Letters, Vol. 56, No. 13 (March C26 Gray and Meyer, "Analysis and Design of 605-632. C27 Grützmacher et al., "Ge segregation in Stechnique and growth atmosphere," App 2531-2533. C28 Hackbarth et al., "Alternatives to thick Nafey, No. 1-2 (July 2000) pp. 148-151. C29 Hackbarth et al., "Strain relieved SiGe b Journal of Crystal Growth, Vol. 201/202 Physics Letters, "Carrier mobilities in modul	SERIAL NO.: FILING DATE: GROUP: Cother Documents: (Including Author, Title, Date, Relevant Pages, Planteractions," Journal of Vacuum Science and Technology A, Vol. 1 1924-1931. Circurie et al., "Carrier mobilities and process stability of strained S in virtual substrates," J. Vac. Sci. Technol. B., Vol. 19, No. 6 (Nov/De Letters, Vol. 64, No. 16 (April 16, 1990) pp. 1943-1946. Circurie et al., "Epitaxial Si-Ge Etch Stop Layers with Ethylene Diame Etchback Silicon-on-Insulator," Journal of Electronic Materials, Vol. 496. Circurie et al., "Band structure, deformation potentials, and carrier SiGe alloys," J. Appl. Phys., Vol. 80, No. 4 (August 15, 1996) pp. 2 Circurie et al., "Dislocation dynamics in relaxed graded composit Science and Engineering B67, (1999) pp. 53-61. Circurie et al., "Relaxed GexSil-x structures for III-V integration dimensional electron gases in Si," AT&T Bell Laboratories, Murray Vacuum Society, pp. 1807-1819 Circurie et al., "Totally Relaxed GexSil-x Layers with Low Three on Si Substrates," Applied Physics Letters, Vol. 59, No. 7 (August Circuries, Physics Letters, Vol. 56, No. 13 (March 26, 1990) pp. 1275-1277. Circurie et al., "Silicon vapor phase epitaxial growth catalysis by the Physics Letters, Vol. 56, No. 13 (March 26, 1990) pp. 1275-1277. Circurancher et al., "Ge segregation in SiGe/Si heterostructures and technique and growth atmosphere," Applied Physics Letters, Vol. 62531-2533. Circurancher et al., "Alternatives to thick MBE-grown relaxed SiGe be 369, No. 1-2 (July 2000) pp. 148-151. Circural et al., "Strain relieved SiGe buffers for Si-based heterost Journal of Crystal Growth, Vol. 201/202 (1999) pp. 734-738. Circural et al., "SiGe-based FETs: buffer issues and device results," pp. 36-41.					

EXAMINER	hau Schult DATE CONSIDERED	8/4/54
		, , , , , , , , , , , , , , , , , , , ,

FORM I	PTO -	1449	ATTY DOCKET NO.:	ASC-023DVC2					
		TAL INFORMATION	APPLICANTS:	Fitzgerald					
DISCLO)SJURI	STATEMONT &	SERIAL NO.:	10/022,689					
		DEC 0 2 2003	FILING DATE:	December 17, 2001					
			GROUP:	2813					
		OTHER ART, JOUR	NAL ARTICLES, ET	C.					
EXAM. INIT.	ОТН	ER DOCUMENTS: (Including Author, Tit	le, Date, Relevant Pages, Pla	ce of Publication)					
All	C32	Höck et al., "High hole mobility in Si0.1" transistors grown by plasma-enhanced ch 76, No. 26 (June 26, 2000) pp. 3920-392	emical vapor deposition,"						
She	C33	Höck et al., "High performance 0.25 µm No. 19 (September 17, 1998) pp. 1888-1	889.						
Sh	C34	Huang et al., "High-quality strain-relaxed substrate," Applied Physics Letters, Vol.	76, No. 19 (May 8, 2000)	рр. 2680-2682.					
Se	<u> </u>	of Solid-State Circuits, Vol. 33, No. 7, Ju	Huang et al., "The Impact of Scaling Down to Deep Submicron on CMOS RF Circuits", IEEE Journal of Solid-State Circuits, Vol. 33, No. 7, July, 1998, pp. 1023-1036.						
Se	C36	IBM Technical Disclosure Bulletin, Vol. 35, No. 4B (September 1992), "2 Bit/Cell EEPROM Cell Using Band to Band Tunneling for Data Read-Out," pp. 136-140.							
RU	C37	IBM Technical Disclosure Bulletin, Volume 32, No. 8A, January 1990, "Optimal Growth Technique and Structure for Strain Relaxation of Si-Ge Layers on Si Substrates", pp. 330-331.							
All	C38	Ishikawa et al., "Creation of Si-Ge-based SIMOX structures by low energy oxygen implantation," Proceedings 1997 IEEE International SOI Conference (October 1997) pp. 16-17.							
Ale	C39	Ishikawa et al., "SiGe-on-insulator substi Letters, Vol. 75, No. 7 (August 16, 1999) pp. 983-985.						
de	C40	Ismail et al., "Modulation-doped n-type No. 10 (September 5, 1994) pp. 1248-12		face," Appl. Phys. Lett., Vol. 65,					
Me	C41	Ismail, "Si/SiGe High-Speed Field-Effect (December 10, 1995) pp. 20.1.1-20.1.4.	et Transistors," Electron De	evices Meeting, Washington, D.C.					
Me	C42	Kearney et al., "The effect of alloy scatte Semicond. Sci Technol., Vol. 13 (1998)		es in a Sil-xGex quantum well,"					
Su	C43	Kim et al., "A Fully Integrated 1.9-GHz Wave Letters, Vol. 8, No. 8, August 199		ier", IEEE Microwave and Guided					
re	C44	Koester et al., "Extremely High Transco CVD," IEEE Electron Device Letters, V	•						
Rle	C45	König et al., "Design Rules for n-Type S (1997), pp. 1541-1547.	SiGe Hetero FETs," Solid S	State Electronics, Vol. 41, No. 10					
WA	C46	König et al., "p-Type Ge-Channel MOD IEEE Electron Device Letters, Vol. 14,							
SAL	C47	König et al., "SiGe HBTs and HFETs,"							
Mu	C48	Kuznetsov et al., "Technology for high-transistors," J. Vac. Sci. Technol., B 130							
Sell	C49	Larson, "Integrated Circuit Technology IEEE Journal of Solid-State Circuits, Vo							



FORM	PTO –	1449	ATTY DOCKET NO.:	ASC-023DVC2				
		TAL INFORMATION ESTATEMENT E	APPLICANTS:	Fitzgerald				
Disco	, o o i d		SERIAL NO.:	10/022,689				
		OEF O 5 JOHNS THE	FILING DATE:	December 17, 2001				
		THE WARTS	GROUP:	2813				
		OTHER ART, JOUR	NAL ARTICLES, ET	C.				
EXAM. INIT.	отн	ER DOCUMENTS: (Including Author, Tit	le, Date, Relevant Pages, Pla	ce of Publication)				
Sk	C50	Lee and Wong, "CMOS RF Integrated C 88, No. 10, October 2000, pp. 1560-157	l					
De	C51	Lee et al., "Strained Ge channel p-type m Sil-xGex/Si virtual substrates," Applied 3344-3346.						
Rle	C52	Lee et al., "Strained Ge channel p-type M Res. Soc. Symp. Proc., Vol. 686 (2002)		-xGex/Si virtual substrates," Mat.				
De	C53	Leitz et al., "Channel Engineering of SiGe-Based Heterostructures for High Mobility MOSFETs," Mat. Res. Soc. Symp. Proc., Vol. 686 (2002) pp. A3.10.1-A3.10.6.						
All	C54	Leitz et al., "Dislocation glide and blocking kinetics in compositionally graded SiGe/Si," Journal of Applied Physics, Vol. 90, No. 6 (September 15, 2001) pp. 2730-2736.						
de	C55	Leitz et al., "Hole mobility enhancements in strained Si/Si1-yGey p-type metal-oxide-semiconductor field-effect transistors grown on relaxed Si1-xGex (x <y) (december="" 17,="" 2001)="" 25="" 4246-4248.<="" 79,="" applied="" letters,="" no.="" physics="" pp.="" substrates,"="" td="" virtual="" vol.=""></y)>						
She	C56	field effect transistors with reduced short (May/June 2002) pp. 1030-1033.	Li et al., "Design of high speed Si/SiGe heterojunction complementary metal-oxide-semiconductor field effect transistors with reduced short-channel effects," J. Vac. Sci. Technol., A Vol. 20 No.3 (May/June 2002) pp. 1030-1033.					
She	C57	Lu et al., "High Performance 0.1 Dm Ga IEEE Transactions on Electron Devices,						
The	C58	M. Kummer et al., "Low energy plasma Engineering B89 (2002) pp. 288-295.	enhanced chemical vapor d	eposition," Materials Science and				
WHE	C59	Maiti et al., "Strained-Si heterostructure (1998) pp. 1225-1246.	field effect transistors," Se	micond. Sci. Technol., Vol. 13				
Se	C60	Maszara, "Silicon-On-Insulator by Wafe Society, No. 1 (January 1991) pp. 341-3		urnal of the Electrochemical				
de	C61	Meyerson et al., "Cooperative Growth P Applied Physics Letters, Vol. 53, No. 25	(December 19, 1988) pp.	2555-2557.				
She	C62	Mizuno et al., "Advanced SOI-MOSFETs with Strained-SI Channel for High Speed CMOS- Electron/Hole Mobility Enhancement, " 2002 Symposium on VLSI Technology, Digest of Technical Papers, Honolulu, (June 13-15), IEEE New York, NY, pp. 210-211.						
Su	C63	Mizuno et al., "Electron and Hold Mobi Insulator Substrates Fabricated by SIMO 5 (May 2000) pp. 230-232.	OX Technology," IEEE Ele	ctron Device Letters, Vol. 21, No.				
Mi	C64	```						



FORM PTO – 1449			ATTY DOCKET NO.:	ASC-023DVC2			
SUPPLEMENTAL INFORMATION			APPLICANTS:	Fitzgerald			
DISCLOSURE STATEMENT E			SERIAL NO.:	10/022,689			
DEC 0 5 50003, 55			FILING DATE:	December 17, 2001			
			GROUP:	2813			
OTHER ART, JOURNAL ARTICLES, ETC.							
EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)						
De	C65	Nayak et al., "High-Mobility Strained-Si PMOSFET's"; IEEE Transactions on Electron Devices, Vol. 43, No. 10, October 1996, pp. 1709-1716.					
De	C66	O'Neill et al., "SiGe Virtual substrate N-channel heterojunction MOSFETS," Semicond. Sci. Technol., Vol. 14 (1999) pp. 784-789.					
Se		Papananos, "Radio-Frequency Microelectronic Circuits for Telecommunication Applications", Kluwer Academic Publishers, 1999, pp. 115-117, 188-193.					
Ale	C68	O'ta, Y. et al., "Application of heterojunction FET to power amplifier for cellular telephone," ELECTRONIC LETTERS, IEE STEVANAGE, GB, Vol. 30 No. 11, 26 May 1994, pp. 906-907.					
She	C69	Parker et al., "SiGe heterostructure CMOS circuits and applications," Solid State Electronics, Vol. 43 (1999) pp. 1497-1506.					
Alle	C70	Ransom et al., "Gate-Self-Aligned n-channel and p-channel Germanium MOSFET's," IEEE Transactions on Electron Devices, Vol. 38, No. 12 (December 1991) pp. 2695.					
Die	C71	Reinking et al., "Fabrication of high-mobility Ge p-channel MOSFETs on Si substrates," Electronics Letters, Vol. 35, No. 6 (March 18, 1999) pp. 503-504.					
Ru	C72	Rim et al., "Enhanced Hole Mobilities in Surface-channel Strained-Si p-MOSFETs"; IEDM, 1995, pp. 517-520.					
L	C73	Rim et al., "Fabrication and Analysis of Deep Submicron Strained-Si N-MOSFET's"; IEEE Transactions on Electron Devices, Vol. 47, No. 7, July 2000, pp. 1406-1415.					
De	C74	Rim, "Application of Silicon-Based Heterostructures to Enhanced Mobility Metal-Oxide- Semiconductor Field-Effect Transistors", PhD Thesis, Stanford University, 1999; pp. 1-184.					
Kle	C75	Robbins et al., "A model for heterogeneous growth of Si1-xGex films for hydrides," Journal of Applied Physics, Vol. 69, No. 6 (March 15, 1991) pp. 3729-3732.					
Xb	C76	Sadek et al., "Design of Si/SiGe Heterojunction Complementary Metal-Oxide-Semiconductor Transistors," IEEE Trans. Electron Devices (August 1996) pp. 1224-1232.					
Me	C77	Schäffler, "High-Mobility Si and Ge Structures," Semiconductor Science and Technology, Vol. 12 (1997) pp. 1515-1549.					
De	C78	Sugimoto and Ueno, "A 2V, 500 MHz and 3V, 920 MHz Low-Power Current-Mode 0.6 □m CMOS VCO Circuit", IEICE Trans. Electron., Vol.E82-C, No. 7, July 1999, pp. 1327-1329.					
Elle	C79	Ternent et al., "Metal Gate Strained Silicon MOSFETs for Microwave Integrated Circuits", IEEE October 2000, pp. 38-43.					
de	C80	Tweet et al., "Factors determining the composition of strained GeSi layers grown with disilane and germane," Applied Physics Letters, Vol. 65, No. 20 (November 14, 1994) pp. 2579-2581.					
Sh	C81	Usami et al., "Spectroscopic study of Si-based quantum wells with neighboring confinement structure," Semicon. Sci. Technol. (1997) (abstract).					
Xa	C82	Welser et al., "Electron Mobility Enhancement in Strained-Si N-Type Metal-Oxide-Semiconductor Field-Effect Transistors," IEEE Electron Device Letters, Vol. 15, No. 3 (March 1994) pp. 100-102.					

EXAMINER have Solution DATE CONSIDERED 8/4/04

				Sheet 12 of 12			
FORM PTO - 1449			ATTY DOCKET NO.:	ASC-023DVC2			
SUPPLEMENTAL INFORMATION			APPLICANTS:	Fitzgerald			
DISCLOSURE STATEMEND I FE			SERIAL NO.:	10/022,689			
DEC 0 2 2003 E			FILING DATE:	December 17, 2001			
			GROUP:	2813			
OTHER ART, JOURNAL ARTICLES, ETC.							
EXAM. INIT.	· · · · · · · · · · · · · · · · · · ·						
Xle	C83	Welser, "The Application of Strained Silicon/Relaxed Silicon Germanium Heterostructures to Metal- Oxide-Semiconductor Field-Effect Transistors," PhD Thesis, Stanford University, 1994, pp. 1-205.					
Xe	C84	Welser et al., "NMOS and PMOS Transistors Fabricated in Strained Silicon/Relaxed Silicon-Germanium Structures," IEEE IDEM Technical Digest (1992 International Electron Devices Meeting) pp. 1000-1002.					
Xk	C85	Welser et al., "Evidence of Real-Space Hot-Electron Transfer in High Mobility, Strained-Si Multilayer MOSFETs," IEEE IDEM Technical Digest (1993 International Electron Devices Meeting) pp. 545-548.					
X4	C86	Wolf and Tauber, Silicon Processing for the VLSI Era, Vol. 1: Process Technology, Lattice Press, Sunset Beach, CA, pp. 384-386 (1986).					
De	C87	Xie et al., "Semiconductor Surface Roughness: Dependence on Sign and Magnitude of Bulk Strain," The Physical Review Letters, Vol. 73, No. 22 (November 28, 1994) pp. 3006-3009.					
De	C88	Xie et al., "Very high mobility two-dimensional hole gas in Si/ GexSi1-x/Ge structures grown by molecular beam epitaxy," Appl. Phys. Lett., Vol. 63, No. 16 (October 18, 1993) pp. 2263-2264.					
X	C89	Xie, "SiGe Field effect transistors," Materials Science and Engineering, Vol. 25 (1999) pp. 89-121.					
Le	C90	Yeo et al., "Nanoscale Ultra-Thin-Body Silicon-on-Insulator P-MOSFET with a SiGe/Si Heterostructure Channel," IEEE Electron Device Letters, Vol. 21, No. 4 (April 2000) pp. 161-163.					
De	C91	Zhang et al., "Demonstration of a GaAs-Based Compliant Substrate Using Wafer Bonding and Substrate Removal Techniques," Electronic Materials and Processing Research Laboratory, Department of Electrical Engineering, University Park, PA 16802 (1998) pp. 25-28.					
He	C92	Tsang et al., "Measurements of alloy composition and strain in thin Ge _x Si _{1-x} layers," <u>J. Appl. Phys.</u> , Vol. 75 No. 12 (June 15, 1994) pp. 8098-8108.					
Me	C93	Sakaguchi et al., "ELTRAN® by Splitting Porous Si Layers," Proc. 195 th Int. SOI Symposium, Vol. 99-3, Electrochemical Society (1999) pp. 117-121.					
De	C94	Yamagata et al., "Bonding, Splitting and Thinning by Porous Si in ELTRAN®; SOI-Epi Wafer™," Mat. Res. Soc. Symp. Proc., Vol. 681E (2001) pp. 18.2.1-18.2.10.					
				B B			

2663709-1

DEC -9 2003
CHHOLOGY CENTER 2800

